

FIG. 1

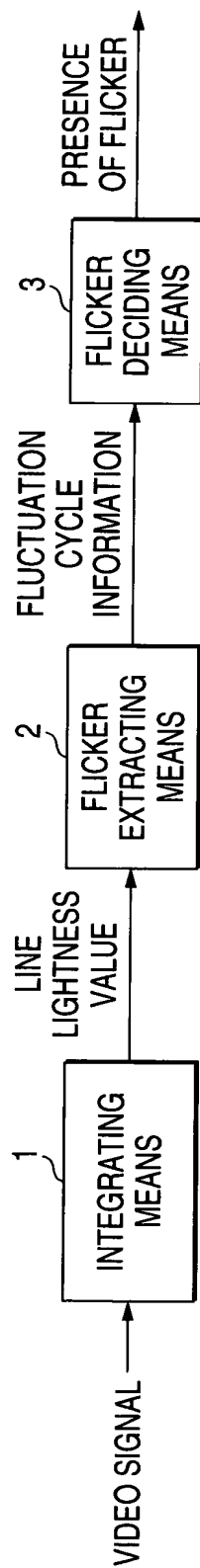


FIG. 2

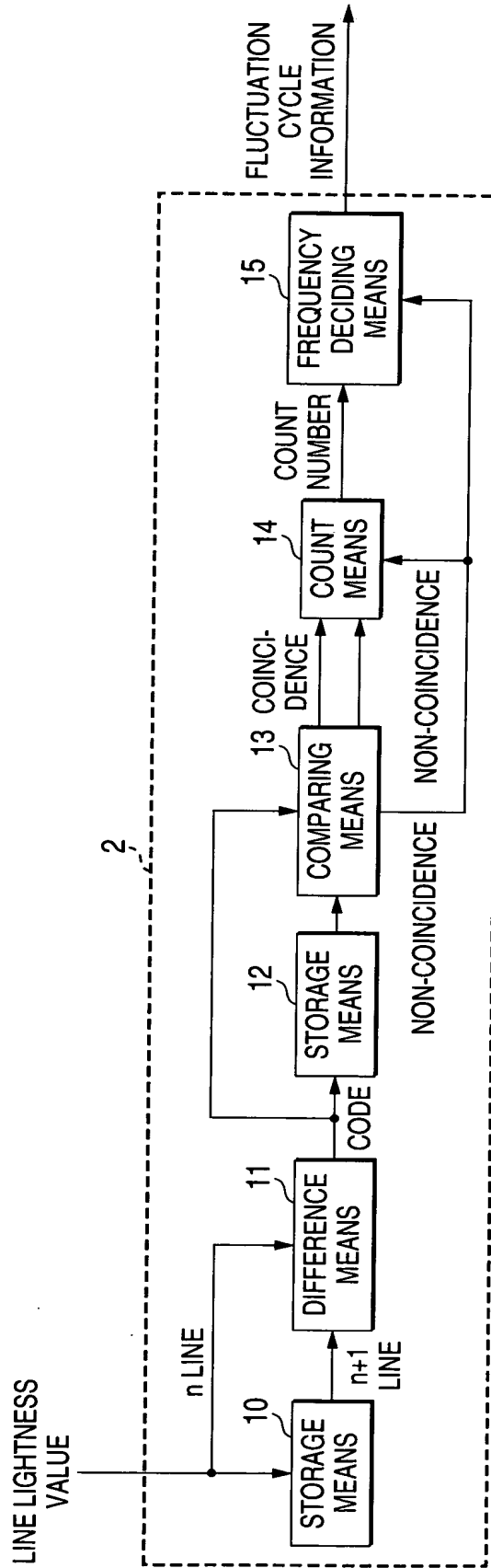
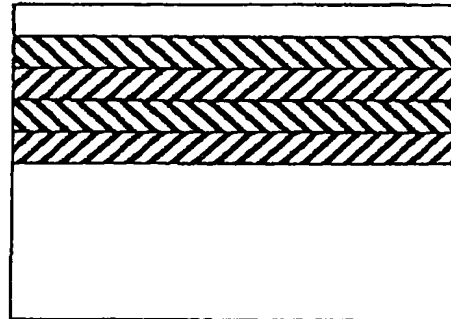


FIG. 3

INTEGRATION BY
INTEGRATING MEANS



n-1 LINE	SUM _{n-1}
n LINE	SUM
n+1 LINE	SUM _{n+1}
n+2 LINE	SUM _{n+2}

FIG. 4

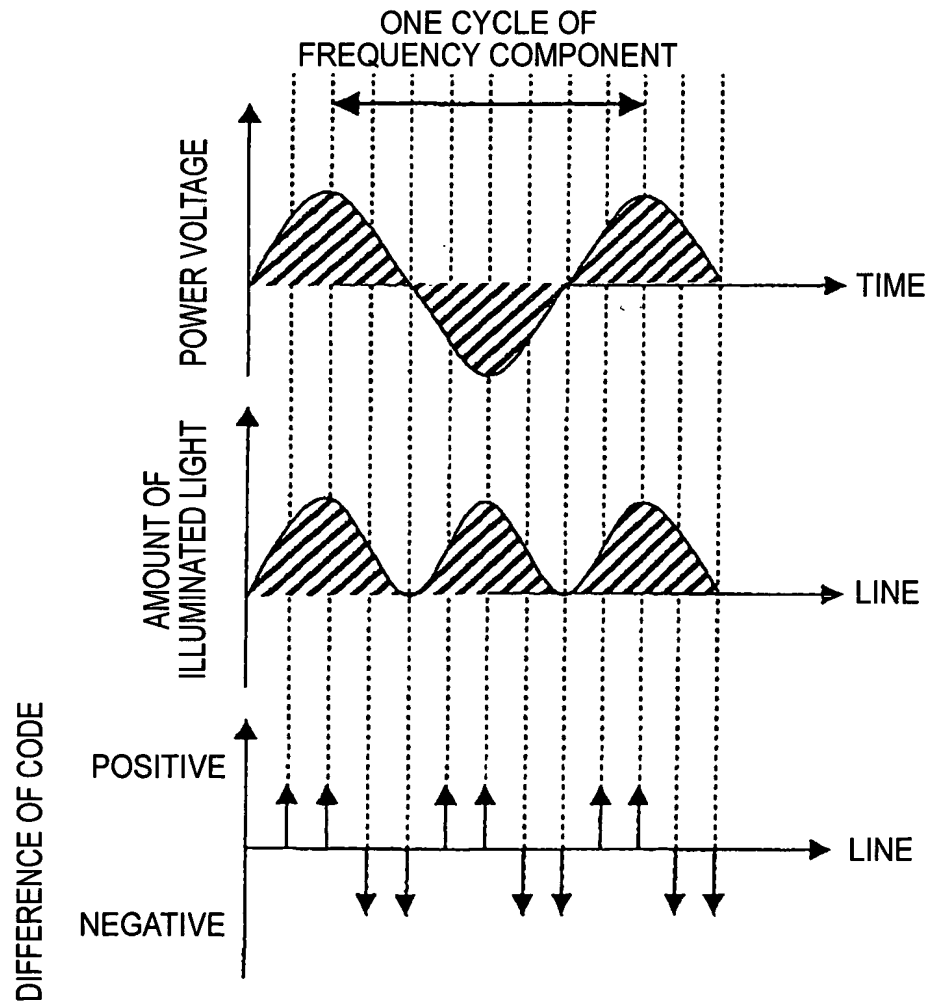
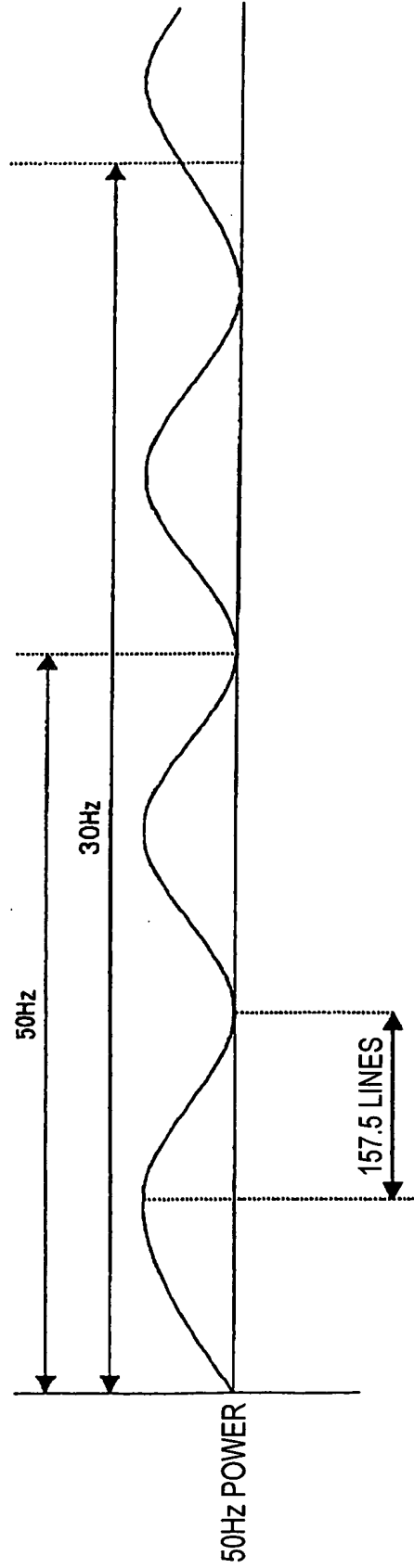


FIG. 5

FRAME RATE 30Hz
 NUMBER OF LINES OF ONE SCREEN 1050 LINES
 POWER FREQUENCY 50Hz



$$\begin{aligned}
 \text{HORIZONTAL SYNCHRONIZING FREQUENCY} &= (\text{FRAME RATE}) \times (\text{NUMBER OF LINES}) \\
 &= (30\text{Hz}) \times 1050 \\
 &= 31500\text{Hz}
 \end{aligned}$$

$$\begin{aligned}
 \text{FLICKER CYCLE} &= \frac{\text{HORIZONTAL SYNCHRONIZING FREQUENCY}}{(\text{NUMBER OF CODE CHANGE POINTS FOR ONE CYCLE}) \times (\text{POWER FREQUENCY})} \\
 &= \frac{(31500\text{Hz})}{4 \times (50\text{Hz})} \\
 &= 157.5 \text{ LINES}
 \end{aligned}$$

FIG. 6

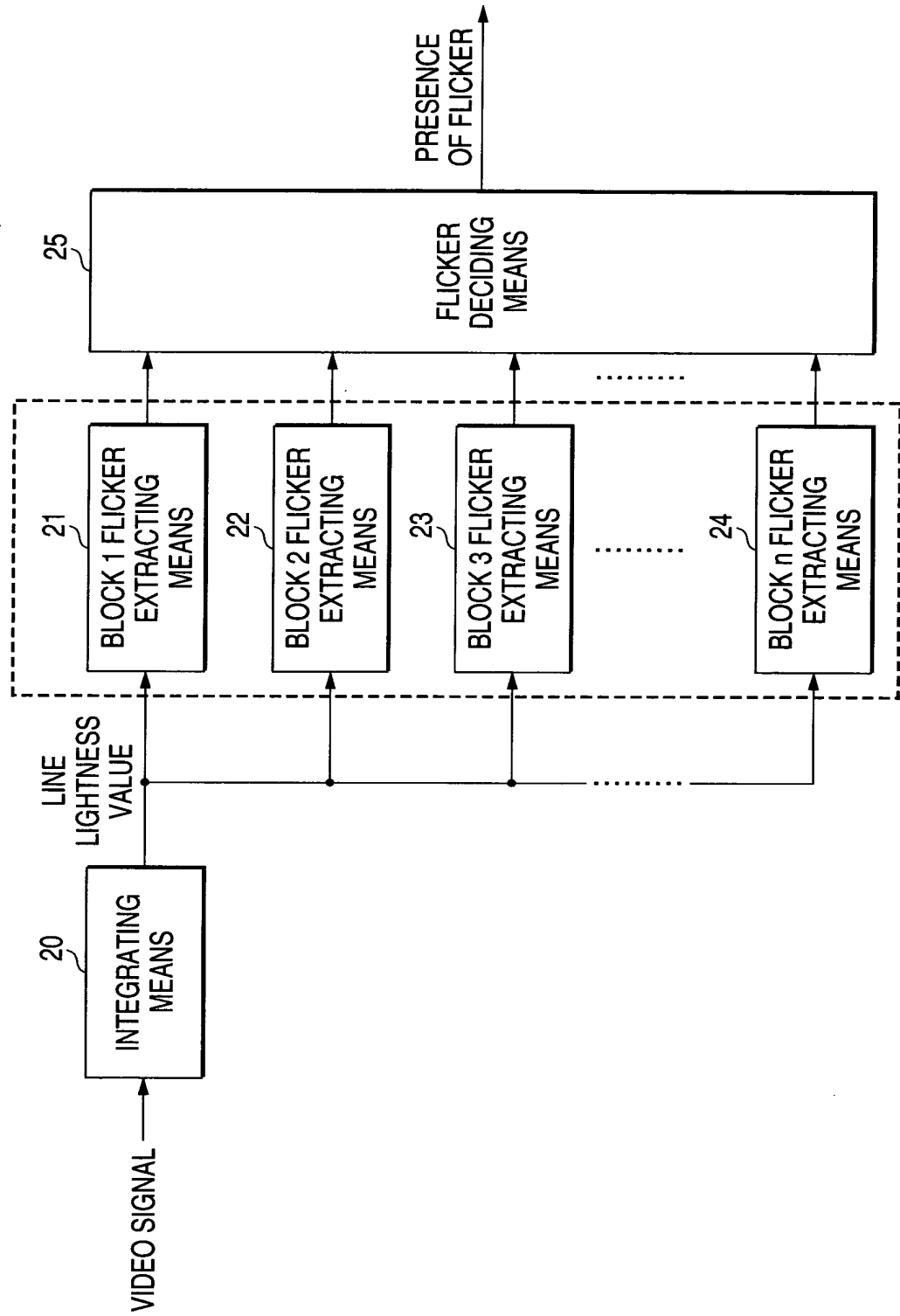


FIG. 7

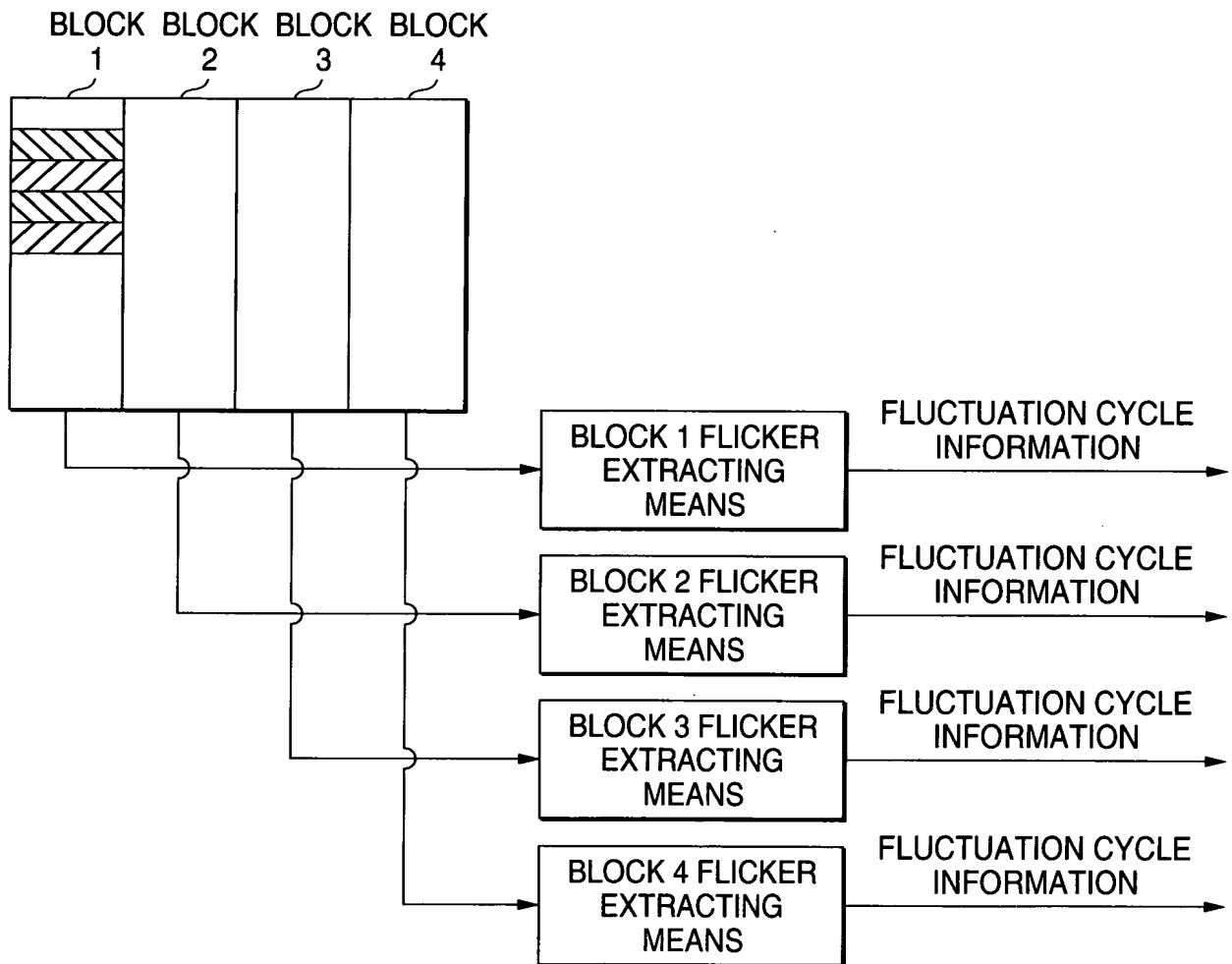


FIG. 8A

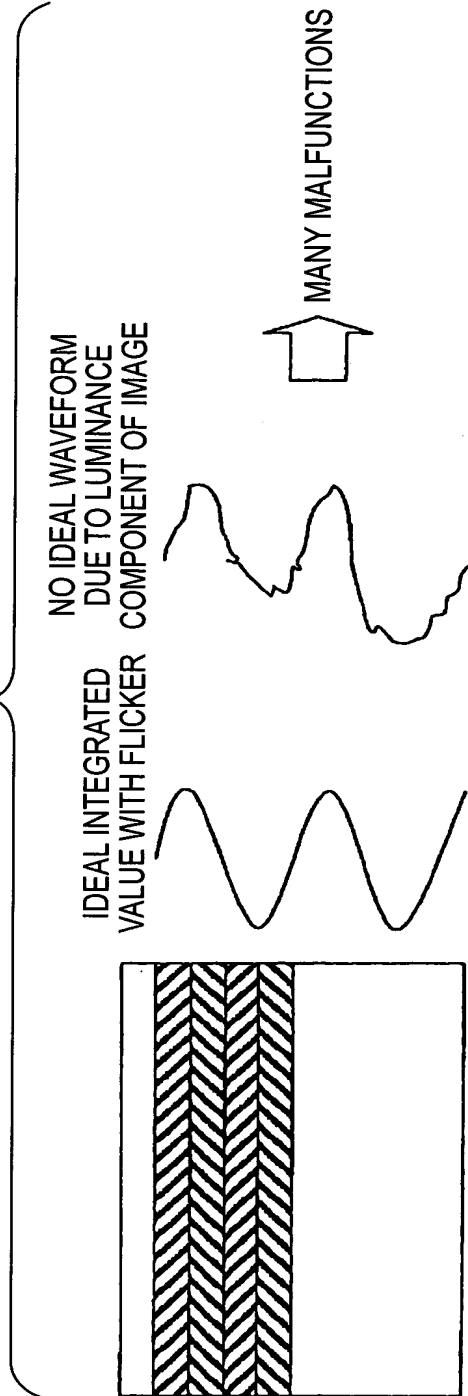


FIG. 8B

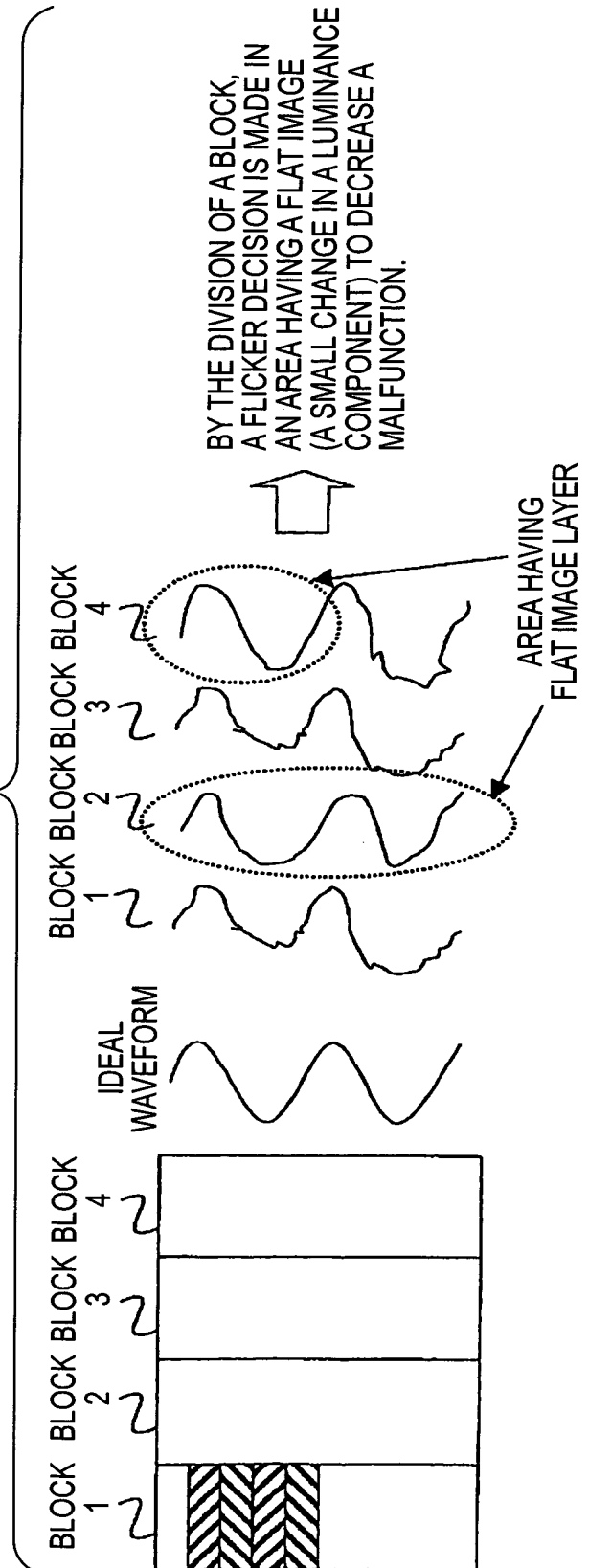


FIG. 9

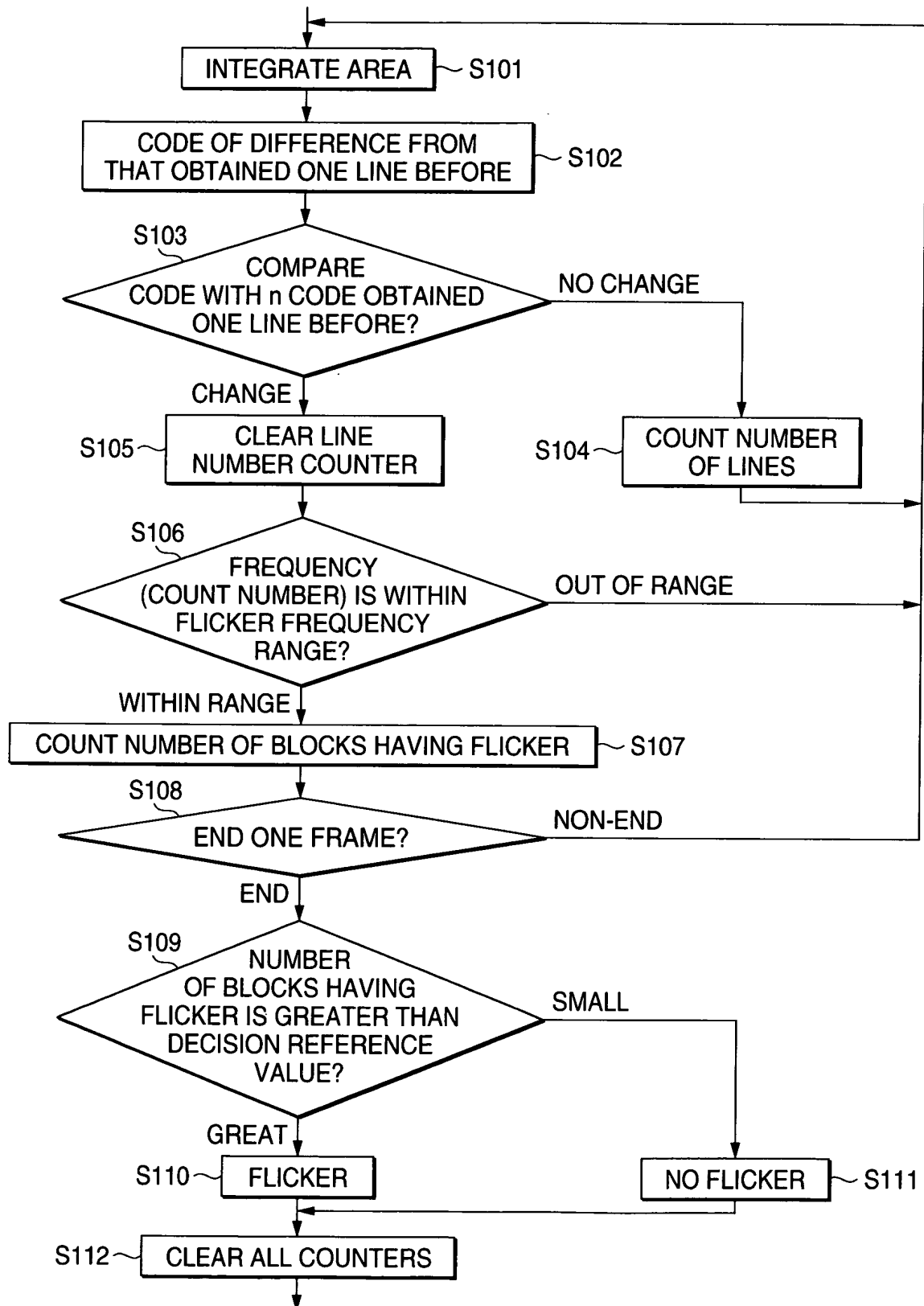


FIG. 10

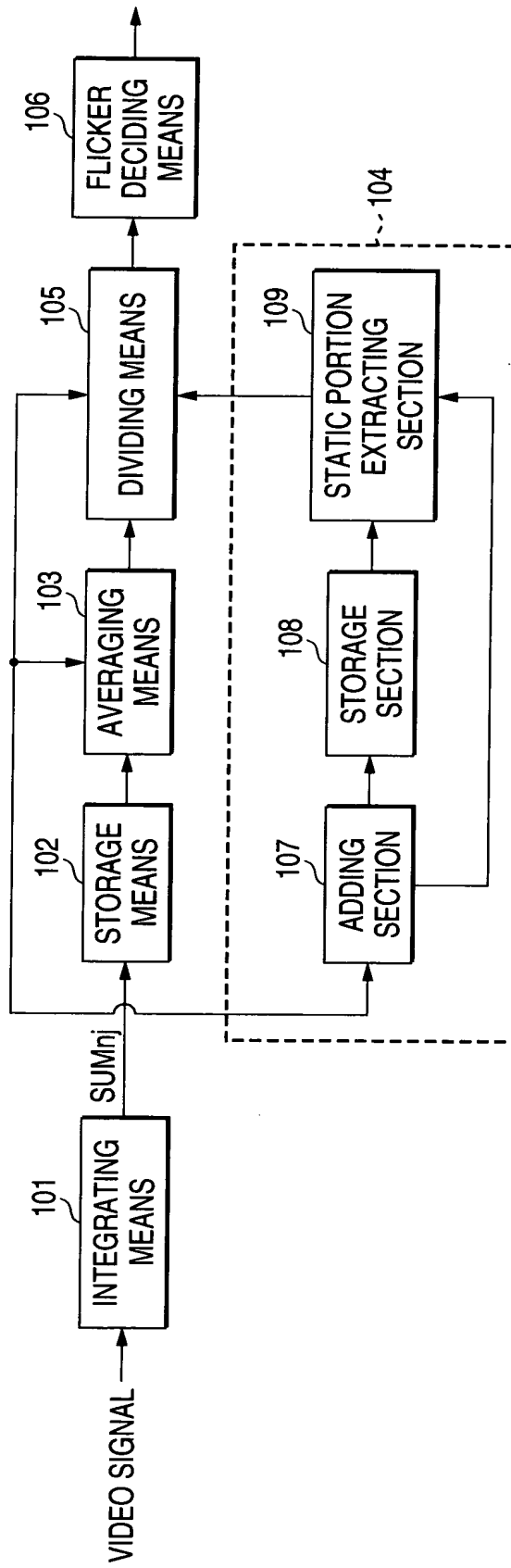
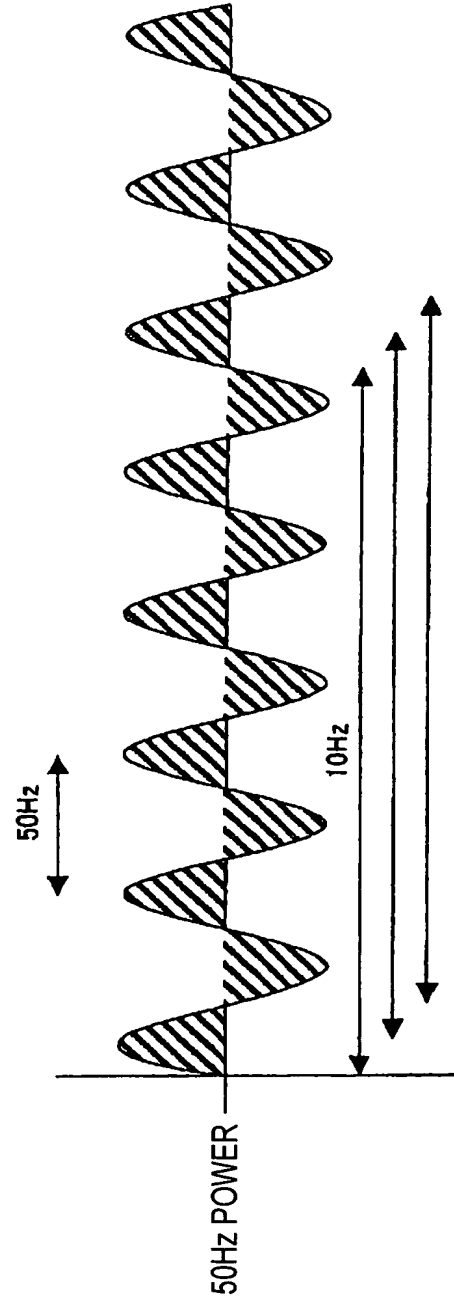
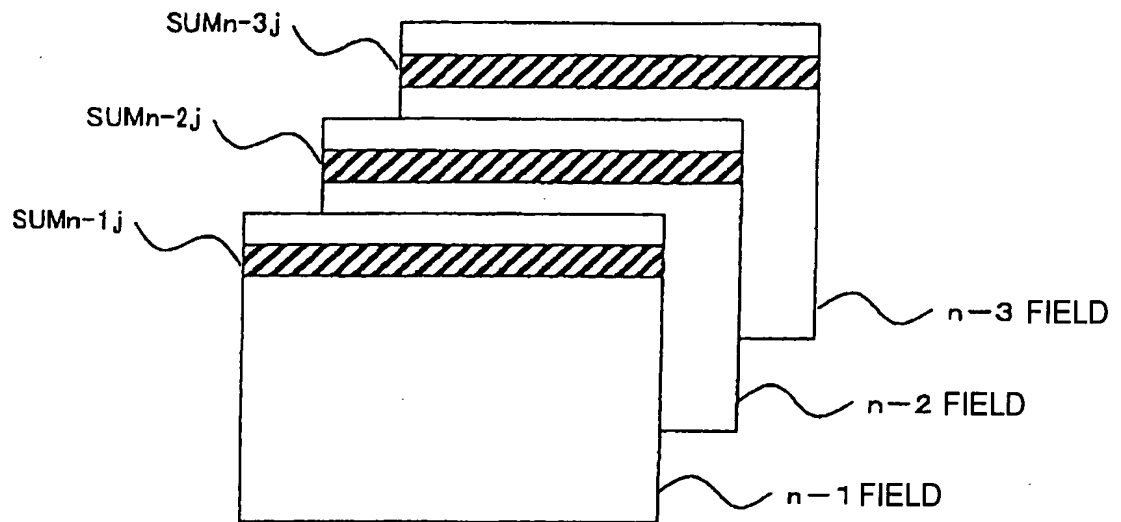


FIG. 11



IN THE CASE IN WHICH A FRAME RATE IS 30Hz AT A POWER OF 50Hz, AN INTEGRATION OF THREE FRAMES (10Hz) IS EQUIVALENT IRRESPECTIVE OF THE SAMPLING IN ANY TIMING. THEREFORE, IT IS POSSIBLE TO REMOVE A FLICKER COMPONENT BY THE INTEGRATION OF THREE FIELDS.

FIG. 12

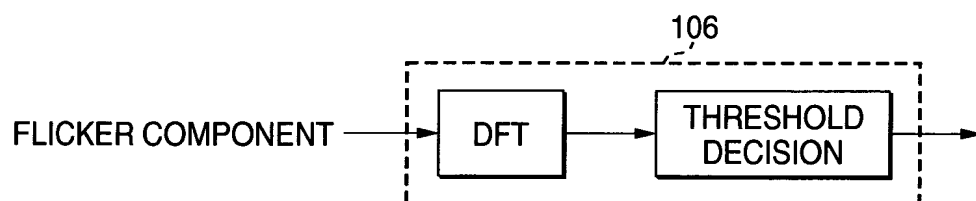


A SIGNAL OBTAINED BY AVERAGING A PREDETERMINED
 AREA CORRESPONDING TO A PLURALITY OF FRAMES
 (THREE FRAMES IN A CONVENTIONAL EXAMPLE)
 HAS NO FLICKER COMPONENT

$$AVE_{nj} = (SUM_{n-1j} + SUM_{n-2j} + SUM_{n-3j}) / 3$$

FIG. 13

FLICKER COMPONENT = $\text{SUM}_{n=1}^j / \text{AVEN}_j$



DFT (DESCRETE FOURIER TRANSFORM) $X(\omega) = 1/2\pi \cdot \int x(t) e^{-i\omega t} dt$

OR

DFT CONVERSION TABLE